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| EXAMINER |
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PHILPOTT, JUSTIN M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2665 | 10 |

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/494,199

Applicant(s)

REZAIIFAR ET AL.

Examiner

Justin M Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In the Amendment filed September 22, 2003, Applicant has amended claims 3 and 29, as well as the specification, to correct minor informalities. In view of the Amendment, the claims and the specification are no longer objected to.

Response to Arguments

2. Applicant's arguments filed September 22, 2003 have been fully considered but they are not persuasive.

First, Applicant argues (section A, pages 8-9) that Chuah fails to teach the limitation of "maintaining a reduced entry PPP connection table" as recited in Applicant's claim 3. However, Chuah clearly teaches maintaining a reduced entry connection table in Table 4 and further teaches that the connectivity is a point-to-point PPP session (e.g., see col. 6, lines 38-39). Thus, the teachings of Chuah anticipate the above limitation of claim 3.

Second, Applicant argues (sections A and B, pages 9-11) that Chuah fails to teach the limitation of updating dormant network connection information as recited in claim 27. However, as previously discussed, Chuah teaches updating dormant network connection information by providing state variables which indicate the presence or lack thereof of a PPP connection for each entry (e.g., see col. 14, lines 1-7). Regarding this passage, however, Applicant argues that Applicant's specification describes a dormant network connection as a PPP connection which is not being used to transmit traffic channel data and is therefore different from the teachings of

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Chuah. In response to Applicant's argument that the references fail to show a certain feature of Applicant's invention, it is noted that the feature upon which Applicant relies (i.e., a dormant network connection that is defined as a PPP connection which is not being used to transmit traffic channel data) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Third, Applicant argues (section B, pages 11-14) that Azam fails to teach the elements of claim 1 that are deficient in Chuah. Specifically, Applicant argues that Azam does not teach or suggest a packet data services node. In response to Applicant's arguments, the recitation of a "packet data services node" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Also, Applicant argues that the list of inactive channels in Azam is not the same as Applicant's "dormant network connections". Similar to the above argument regarding Chuah, Applicant argues that Applicant's specification describes a dormant network connection as a PPP connection which is not being used to transmit traffic channel data and is therefore different from the teachings of Azam. In response to Applicant's argument that the references fail to show a certain feature of Applicant's invention, it is noted that the feature upon which Applicant relies (i.e., a dormant network connection that is defined as a PPP connection which is not being used

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to transmit traffic channel data) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, Applicant argues that the signal of Azam is not a message including a reduced list of identifiers associated with the dormant network connections. Specifically, Applicant cites a passage (col. 6, lines 23-41) wherein Azam discloses “a signal instructing the radiotelephone to change to a new channel”, and Applicant argues that this signal is not a message including a list as recited in claim 1. However, as cited by Examiner in the previous office action and additionally cited herein, Azam teaches a message including a list as claimed within col. 6, lines 17-20, wherein Azam teaches a signal is transmitted which “include[s] a list of certain channels to scan”, wherein the channels identify dormant connections.

Fourth, Applicant argues (section B, pages 13-14) that Examiner has presented no motivation to combine the references and no expectation of success in such a combination. However, as discussed in the previous office action (see page 5) and further herein, the method of Azam provides for improved mobile communications wherein cross-talk and interfering signals are avoided via user initiated channel change (e.g., see Azam col. 7, lines 1-14). The system of Chuah is also directed towards improving mobile communications. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the mobile communication teachings of Azam to the mobile communication system of Chuah to provide user initiated channel change yielding improved mobile communications wherein cross-talk and interfering signals are avoided.

Fifth, Applicant argues (section B, pages 14-18) that Chuah in view of Azam fail to teach the limitations of claim 5. Specifically, Applicant makes arguments as discussed above (second, third and fourth paragraphs), namely, that Chuah does not disclose dormant network connections as described in Applicant's specification, that Azam does not teach a packet data services node, that Azam does not suggest dormant network connections as described in Applicant's specification, that Azam does not teach transmitting a message as claimed, and that the Examiner has presented no motivation to combine the references and no expectation of success in such a combination. The following remarks regarding the above arguments are additionally provided in the following paragraphs:

As previously discussed, Chuah teaches updating dormant network connection information by providing state variables which indicate the presence or lack thereof of a PPP connection for each entry (e.g., see col. 14, lines 1-7). Regarding this passage, however, Applicant argues that Applicant's specification describes a dormant network connection as a PPP connection which is not being used to transmit traffic channel data and is therefore different from the teachings of Chuah and Azam. In response to Applicant's argument that the references fail to show a certain feature of Applicant's invention, it is noted that the feature upon which Applicant relies (i.e., a dormant network connection that is defined as a PPP connection which is not being used to transmit traffic channel data) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicant's argument that Azam does not teach or suggest a packet data services node, the recitation of a "packet data services node" has not been given patentable

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weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to Applicant's argument that the references fail to show a certain feature of Applicant's invention, that is, the list of inactive channels in Azam is not the same as Applicant's "dormant network connections" as described in Applicant's specification, it is noted that the feature upon which Applicant relies (i.e., a dormant network connection that is defined as a PPP connection which is not being used to transmit traffic channel data) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to Applicant's argument that the signal of Azam is not a message including a list as recited in claim 1, as cited by Examiner in the previous office action and additionally cited herein, Azam teaches a message including a list as claimed within col. 6, lines 17-20, wherein Azam teaches a signal is transmitted which "include[s] a list of certain channels to scan", wherein the channels identify dormant connections.

In response to Applicant's argument that Examiner has presented no motivation to combine the references and no expectation of success in such a combination, as discussed in the previous office action (see page 5) and further herein, the method of Azam provides for

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improved mobile communications wherein cross-talk and interfering signals are avoided via user initiated channel change (e.g., see Azam col. 7, lines 1-14). The system of Chuah is also directed towards improving mobile communications. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the mobile communication teachings of Azam to the mobile communication system of Chuah to provide user initiated channel change yielding improved mobile communications wherein cross-talk and interfering signals are avoided.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 3, 4 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,496,491 to Chuah et al.

Regarding claims 3 and 27, Chuah teaches a method of simplifying Packet Control Function network element functionality when a mobile station (e.g., PC 805 in FIG. 8) moves from a first infrastructure element (e.g., 815) of a packet data services network to a second infrastructure element (e.g., 820) of the packet data services network (e.g., see col. 8, line 64 – col. 9, line 41), the method comprising the step of maintaining a reduced entry PPP connection table (e.g., connection table, Table 4, in col. 6, lines 10-20; see also col. 10, lines 23-39). Further, regarding claim 27, Chuah teaches a PDSN (e.g., 810) comprising a radio-access-network-PDSN channel interface (e.g., 814, 819), inherently comprising a processor and processor-readable medium, and the medium containing a set of instructions to update the

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dormant network connection information (e.g., lack thereof of PPP connections) associated with the mobile station (e.g., see col. 14, lines 1-7).

Regarding claims 4 and 28, Chuah teaches the dormant network connection information does not include service reference identifiers.

Regarding claim 29, Chuah teaches the first (815) and second (820) infrastructure elements comprise packet data service nodes (e.g., Network Access Serving nodes receiving packet data, see col. 1, line 55 – col. 2, line 37).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 2 and 5-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah in view of U.S. Patent No. 6,167,260 to Azam et al.

Regarding claims 1, 5, 9, 15 and 21, Chuah teaches the method as discussed above regarding claims 3 and 27, however, may not specifically disclose transmitting a reduced list of identifiers associated with dormant network connections. Similar to Chuah, Azam teaches a method for hand-offs. Specifically, Azam teaches optimizing resources in a communications network (e.g., see FIGS. 1 and 2) when a mobile station (e.g., 102) moves from a first infrastructure element (e.g., 104') to a second infrastructure element (e.g., 104) associated with a node (e.g., 152) of the communications network, the method comprising the steps of: transmitting from the second infrastructure element (104) a message (e.g., signal, see col. 6, lines 17-20) including a number of dormant network connections associated with the mobile station

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(e.g., see col. 5, lines 7-24 regarding the list of inactive channels). While, Azam may not specifically disclose the same message further includes a reduced list of identifiers or enhanced information associated with the dormant connections, Azam additionally teaches sending a second message from the second infrastructure element (104) including a reduced list of identifiers or enhanced information associated with the dormant connections (e.g., see col. 6, lines 23-41 regarding the new channel) in response to mobile station's (102) denying channel scanning. At the time of the invention it would have been obvious to one of ordinary skill in the art to transmit both messages (i.e., signals) in a single message in order remove the step of the mobile station (102) responding to the element (104) with a denying response in order to improve bandwidth efficiency. The method of Azam provides for improved communications wherein cross-talk and interfering signals are avoided via user initiated channel change (e.g., see col. 7, lines 1-14). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Azam to the method of Chuah in order to provide improved communications wherein cross-talk and interfering signals are avoided.

Further, regarding claim 9, Azam teaches the mobile station comprises an antenna (132), a processor (110) and a transmitter (130). Further, regarding claims 5, 9, 15 and 21, while Chuah in view of Azam teaches transmitting from the second infrastructure element (104) as recited in claim 1, one of ordinary skill in the art would be motivated to advantageously apply these teachings of Chuah in view of Azam to a system having transmitting from the mobile station in order to achieve the same resource optimizations of Chuah in view of Azam wherein cross-talk and interfering signals are avoided.

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Regarding claims 2, 12, 18 and 24, the identifiers (e.g., new channel) taught by Azam are not Service Request Identifiers.

Regarding claims 6, 14, 20 and 26, Azam teaches the enhanced information (e.g., new channel) includes packet zone information (e.g., a substantially different frequency than the previously used frequency, see col. 6, lines 26-41).

Regarding claims 7, 8, 10, 16 and 22, by sending both signals in a single message as discussed above regarding claim 1, the teachings of Azam conserve traffic channel resources by reducing session negotiation and registration. While Azam, may not specifically disclose using Mobile IP, Examiner takes official notice that such a protocol is well known in the art. Furthermore, Chuah specifically teaches PPP connections are utilized. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Azam to the method of Chuah in order to the reduce PPP session negotiation and Mobile IP registration thus conserving resources as suggested by Azam discussed above by sending signals in a single message.

Regarding claims 11, 17 and 23, as discussed above regarding claim 29, Chuah teaches infrastructure elements comprise packet data service nodes (e.g., Network Access Serving nodes receiving packet data, see col. 1, line 55 – col. 2, line 37).

Regarding claims 13, 19 and 25, while Azam may not specifically disclose the message comprises an origination message including an indicator that the dormant (i.e., inactive) network connections are dormant, Azam teaches the list of signal channels transmitted may be either active connections (e.g., see col. 4, lines 56-59) or inactive connections (e.g., see col. 5, lines 7-9). At the time of the invention it would have been obvious to one of ordinary skill in the art to

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include an indicator within the message to indicate whether the connections are either active or inactive, as suggested by Azam by teaching the connections may be either active or inactive wherein the radiotelephone (102) implicitly determines or is configured to know whether the connections in the list are either active connections or inactive connections.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

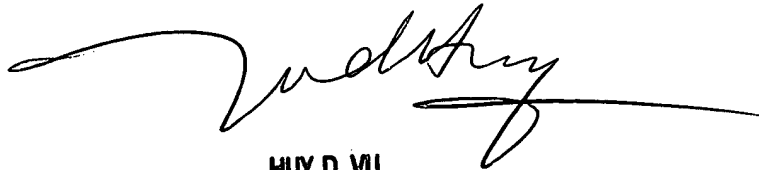
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4750.



Justin M Philpott



HUY D. VU
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